# Talon

## Area Luminaire

# TALON

## AREA LUMINAIRE

### TABLE OF CONTENTS

Performance + Versatility................................3
Quality + Durability .......................................5
Control + Efficiency .......................................7
Specification Features ..................................11
Options + Accessories .................................13
Photometrics................................................15
Ordering Information [TMU + TLU]................17

### VERSATILE PERFORMANCE

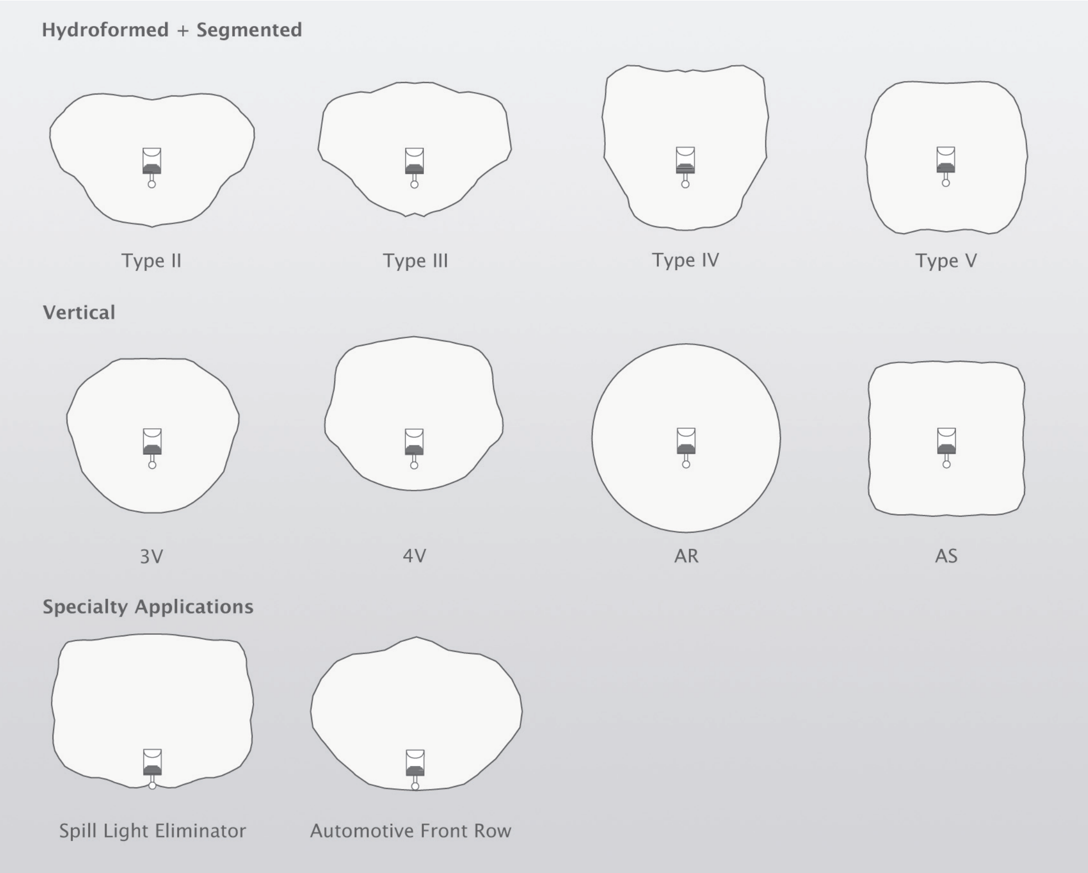
Talon's ingenious blend of performance and versatility allows application specific illumination by way of fourteen [14] high efficiency, field rotatable optical systems. Offered with the unrivaled Spill Light Eliminator [SL] optic for areas requiring strict light trespass control, and the premier Automotive Front Row [AF] optic for precisely illuminated automotive dealership front row displays. Flat glass or sag, vertical lamp or horizontal, segmented optic or formed, Talon offers a myriad of optical solutions to satisfy exacting application requirements.

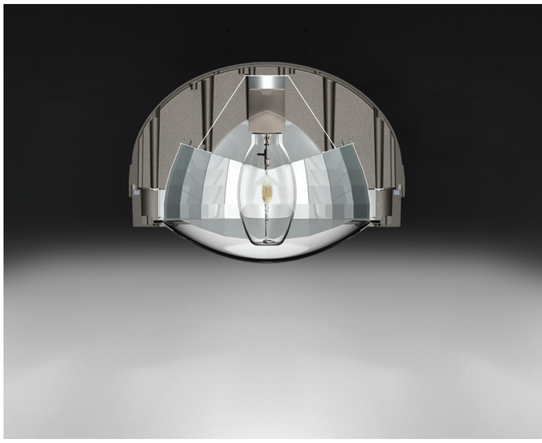
# SITE + PARKING | ROADWAY | PATH OF EGRESS

**IMPENETRABLE FORM**
Coupling precise mechanical design with premium quality materials, the Talon site light is constructed to sustain the rigors of outdoor operation. Thick wall die-cast aluminum construction and channel set silicone gasketing form an impenetrable IP65 barrier optimizing optical efficiency and fixture longevity in the harshest of environments.

**INNOVATIVE FOREFRONT**
Forward Leaning— two words that describe Streetworks' product development process and relentless commitment to providing progressive solutions for emerging market trends. Regardless of the ordinance governing your site—spill control, emergency egress, energy efficiency or curfew compliance, the Talon offers progressive features to address rigorous regulatory needs.

# PERFORMANCE + VERSATILITY


Hydroformed + Segmented
Type II
Type III
Type IV
Type V
Vertical
3V
4V
AR
AS
Specialty Applications
Spill Light Eliminator
Automotive Front Row

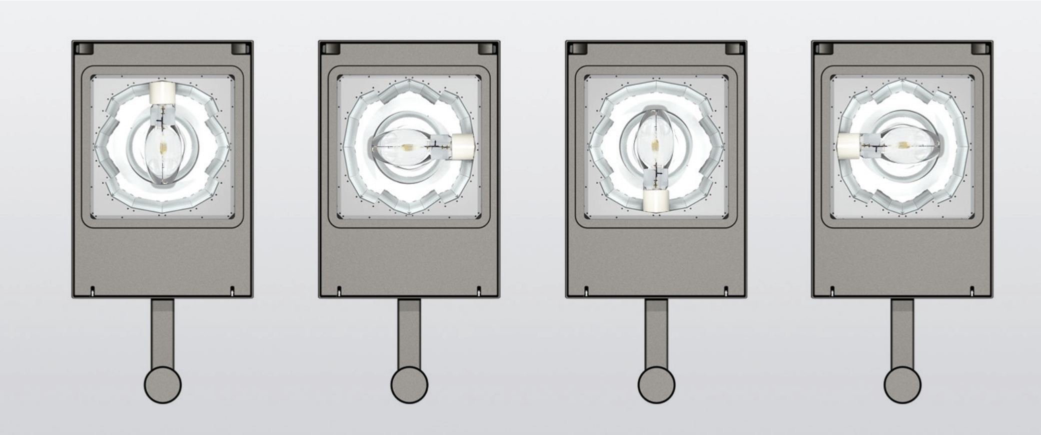


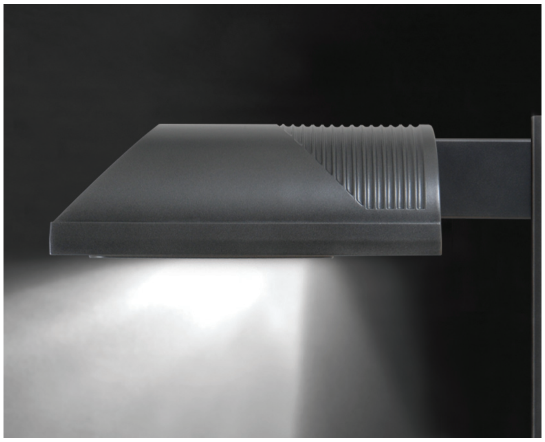
**OPTICAL VERSATILITY**
Never before has a single luminaire supported this magnitude of optical choices, touting four [4] distinct families of optical assemblies, all with compelling performance. Hydroformed, segmented, vertical and specialty application optical systems allow finely tuned site lighting solutions with unprecedented levels of uniformity and control.

**MAXIMIZE SITE UNIFORMITY**
Add sparkle to your site and maximize pole spacings with sag glass optical systems offered in both cutoff and semi-cutoff configurations.
For applications mandating full cutoff, choose from a complete offering of flat glass vertical lamp solutions. The vertically lamped family of optical systems minimizes light levels directly below the luminaire while increasing lateral illumination, maximizing overall site uniformity. Available in Type III, Area Round, Area Square, Type IV and Automotive Front Row [TLU only] distributions.

## OPTICAL SOLUTIONS AS DIVERSE AS THE ENVIRONMENTS THEY ILLUMINATE.

Exterior lighting requirements continue to grow more stringent with added emphasis on light control and system efficiency. Whether the goal of your site lighting design is safety, general illumination or highlighting prominent features, Talon offers application-specific optical solutions that provide the highest level of photometric performance and control.





### ROTATIONAL FLEXIBILITY

Maintain uniform site spacing and fixture orientation with rotatable optical assemblies. All optics are capable of rotating in 90° increments allowing for manipulation of distribution orientation independent of fixture position.

### DARK SKY FRIENDLY

For applications requiring dark sky friendly solutions, look to full cutoff flat glass optical assemblies providing focused illumination with zero uplight and minimal high angle illumination while retaining superior uniformity. Available in hydroformed or segmented Type II, III, IV, V and SL distributions.

DARK SKY COMPLIANT FCO Full Cutoff

**NOTE:** In Flat Glass configurations only.

### LEADING SPILL CONTROL

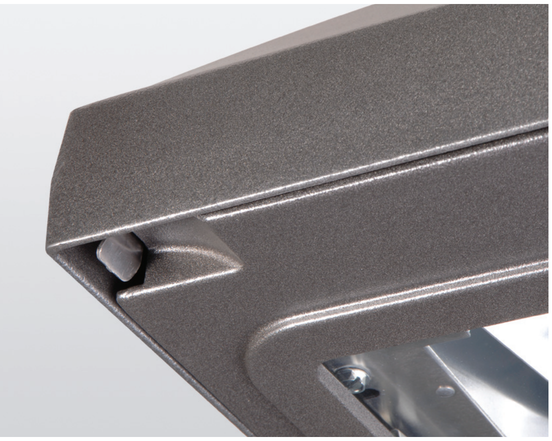
The Spill Light Eliminator [SL] optic is the industry leader in effective spill light control, eliminating light beyond one [1] mounting height behind the pole with no sacrifice in forward illumination. Used along site perimeters and property lines, the Spill Light Eliminator keeps the light inside and the darkness out.

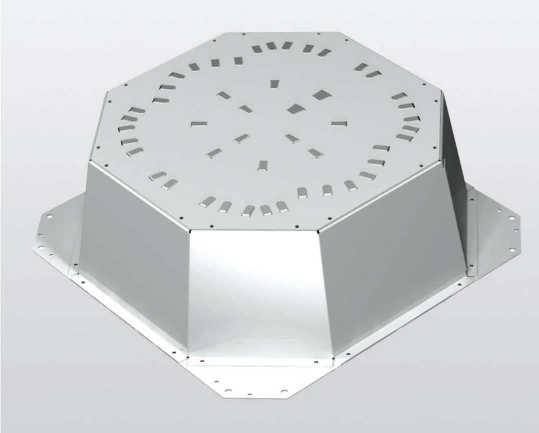
### GET NOTICED

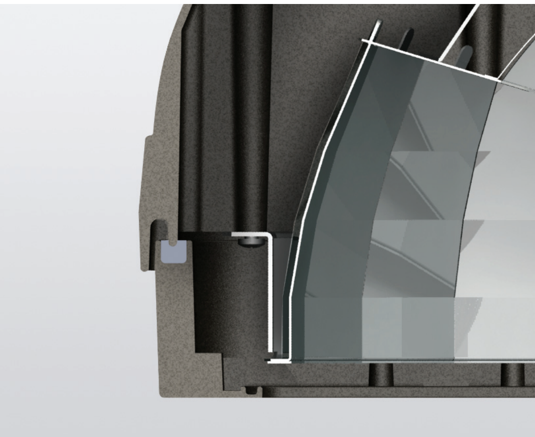
Accel Optics, the Talon's family of automotive reflector solutions specialize in focused front row product displays that engage the customer, general merchandise lighting that creates an inviting dealership appearance emanating safety and security, and perimeter lighting that precisely frames the automotive dealership lot.

AccelOptics

# QUALITY + DURABILITY







## DURABLE CAST CONSTRUCTION

Low-copper alloy die-cast aluminum construction offers corrosion resistance while precise tolerance control ensures tight nesting of the door and housing. Combining heat extracting reveal channels with independent optical and electrical chambers that isolate heat producing sources, the Talon's housing design is both functionally relevant and aesthetically pleasing.

## TOOLLESS ENTRY

Invisibly integrated door retaining latches allow for a consistent outward aesthetic while providing maintenance-friendly, toolless entry into the optical and electrical chambers. The corrosion-resistant stainless spring steel latch and door receiver pin create an audible engagement confirming secure door closure and fixture sealing.

## RIGID OPTICAL CONSTRUCTION

A commitment to optical research and precision build quality result in unequaled levels of performance and repeatability. A rigid box enclosure shields segmented optical facets on all sides from performance degrading damage while each facet bank is secured to both the top and bottom of the enclosure providing repeatable facet orientation relative to light center.

## PREMIUM MATERIALS

Superior optical design and a commitment to premium 95% reflective sheet aluminum make Talon's segmented reflector family the benchmark of optical excellence. Reflector facets are flat and unobstructed by rivets or other means of attachment which may cause streaks or striations in the light distribution. First class construction and attention to detail ensure dependable performance in every installation.

## INGRESS PROTECTION

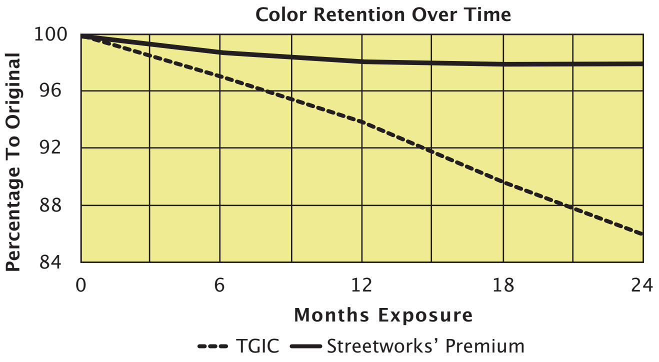
“IP” stands for Ingress Protection and is a rating system recognized internationally as the standard for electrical products and other related technologies. The two numbers proceeding the “IP” individually callout the fixture's protection rating against moisture and airborne particulates. The channel set silicone gasketing system incorporated in Talon is IP65 certified. Dust, insects and moisture simply have no chance of penetrating the outer enclosure.

## CONFIDENCE-INSPIRING QUALITY BEYOND THE SUM OF ITS PARTS.

From the stainless steel hinges to the rugged housing, every detail of the Talon construction is precisely designed with industry leading craftsmanship. Heavy-wall die-cast aluminum construction, premium TGIC [triglycidyl isocyanurate] polyester powder coat paint and an IP65 rated optical cavity ensure Talon can endure the harshest environments.

## FINISH OPTIONS

Streetworks' premium polyester powder coatings are enhanced TGIC based coatings formulated to withstand extended outdoor exposure. The powders are designed not only to be functional, but decorative, combining good film appearance with excellent mechanical and exterior exposure qualities. Formulated with properties similar to a standard TGIC, the improved weathering characteristics of premium TGIC result from the integration of a new polyester resin technology. These coatings consistently display at least twice the gloss retention of standard TGIC materials in both weatherometer and QUV testing, making them ideal for outdoor lighting fixtures and poles. Applied to a nominal 2.5 mil thickness, Talon's six (6) standard finishes offer superior protection against fade and wear.



**GREY** [AP]

**BLACK** [BK]

**BRONZE** [BZ]

**WHITE** [WH]

**DARK PLATINUM** [DP]

**GRAPHITE METALLIC** [GM]

# CONTROL + EFFICIENCY

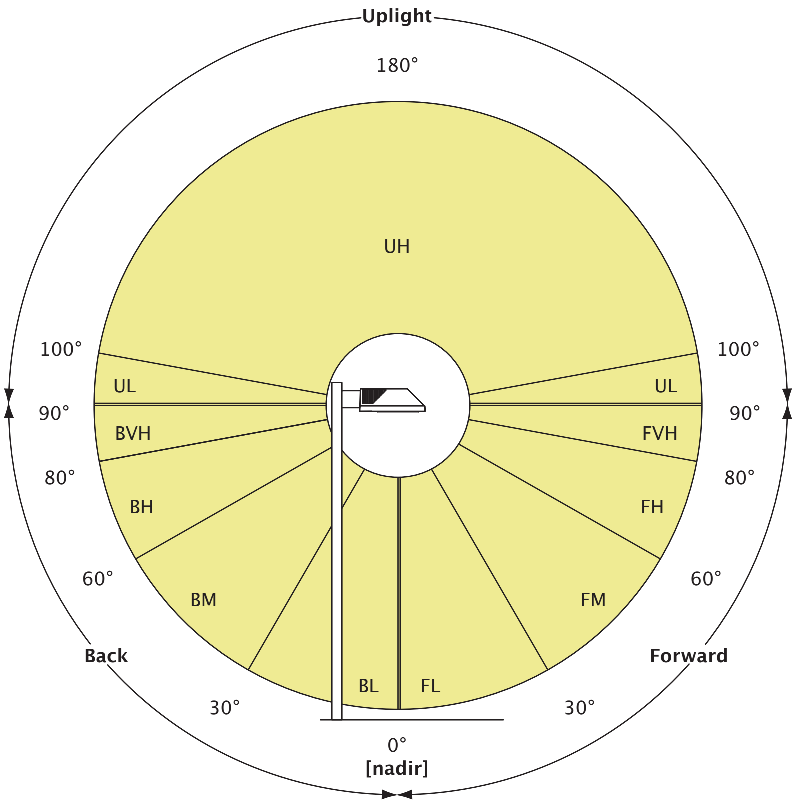
### LUMINAIRE CLASSIFICATION

The IESNA's revised Luminaire Classification System [TM15-07 revised] creates a new basis of measurement for site lighting visibility and adjacent property interaction. This technical memorandum subdivides the luminaire distribution into smaller angular zones and subzones to more clearly represent how much light is emitted at various angles. The values for each subzone give an indication of the appropriate use for the luminaire within an application. For dark sky sensitive areas, the uplight component tells how much the luminaire will contribute to sky glow.
For applications with strict light trespass regulations, the back light portion of the distribution helps determine how much light will reach neighboring properties. Talon reflector assemblies keep light on task by contributing as little as 0.0% total upward illumination and 0.8% total backlight.

**Forward Light**
Forward Light Low [FL]
Forward Light Mid [FM]
Forward Light High [FH]
Forward Light Very High [FVH]

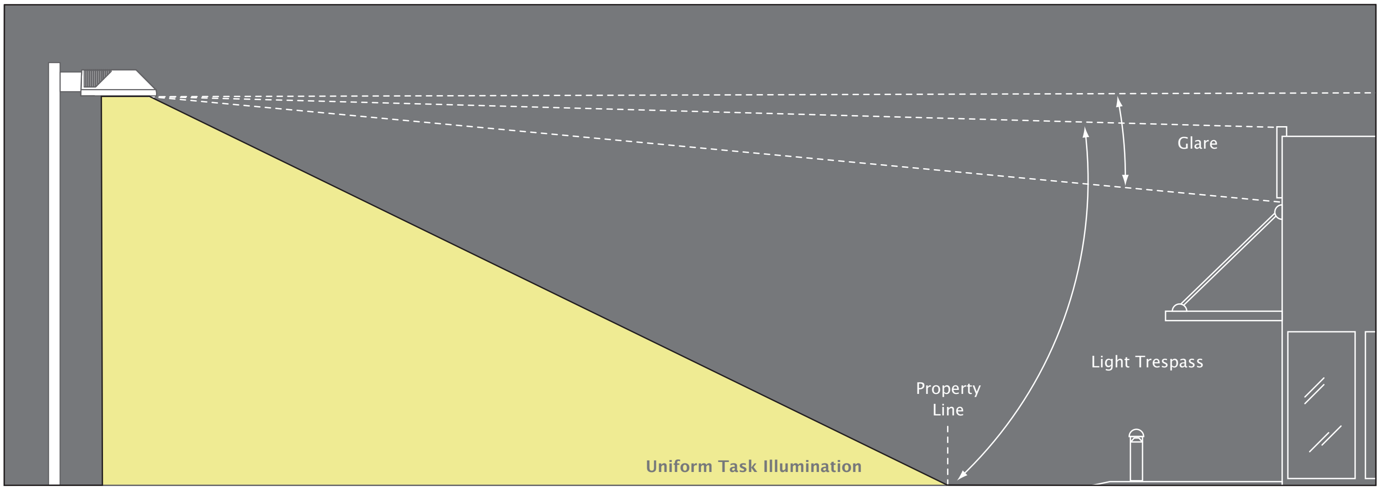
**Back Light**
Back Light Low [BL]
Back Light Mid [BM]
Back Light High [BH]
Back Light Very High [BVH]

**Uplight**
Uplight Low [UL]
Uplight High [UH]



### NEIGHBORHOOD AND DARK SKY FRIENDLY

National organizations work to educate the general public on best lighting practices in order to minimize light trespass, reduce sky-glow and improve nighttime visibility through glare reduction. Experts understand the visual system adapts to surrounding ambient conditions, spurring a move from universal light level recommendations to a set of custom tailored guidelines for each task based on an application's lighting zone. When surrounding conditions are dim, lower levels of light are able to be detected more easily. In these environments, high light level applications can be a source of discomfort and glare. Careful selection and placement of luminaires eliminates glare and creates a comfortable nighttime environment. Talon's assortment of specialty light control optical assemblies combined with a wide array of internal or external house-side shields provide the perfect solution for every application.

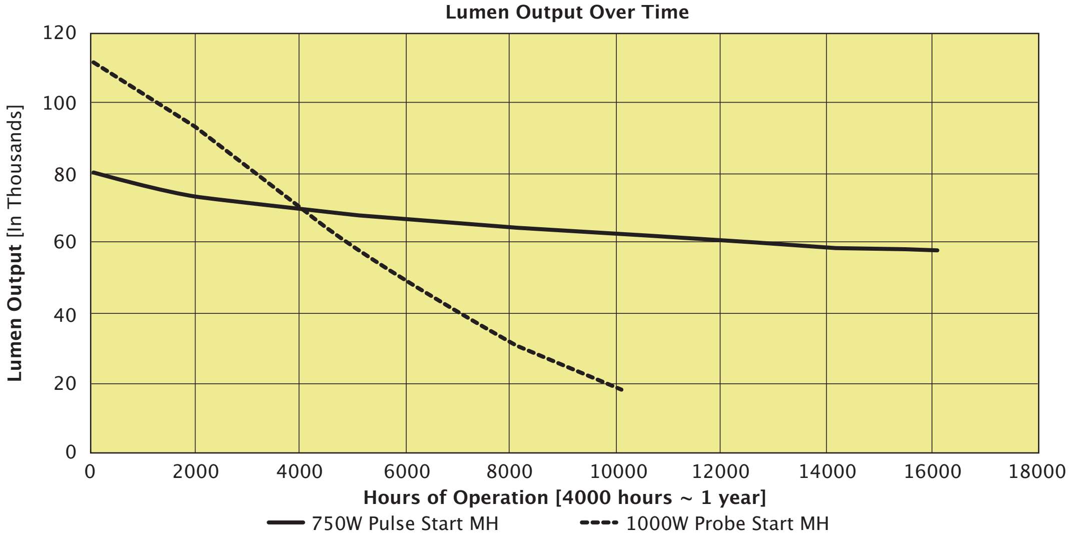


## STEPPING UP TO THE CHALLENGE.

As visual research advances so too the core understanding of how light interacts with surrounding communities and nocturnal environments. Utilizing this knowledge, Federal programs, national organizations and industry leaders institute guidelines for illuminating an area safely and securely while reducing energy, eliminating spill light and minimizing glare. Talon steps up to the challenge, offering innovative solutions to regulatory compliance issues.

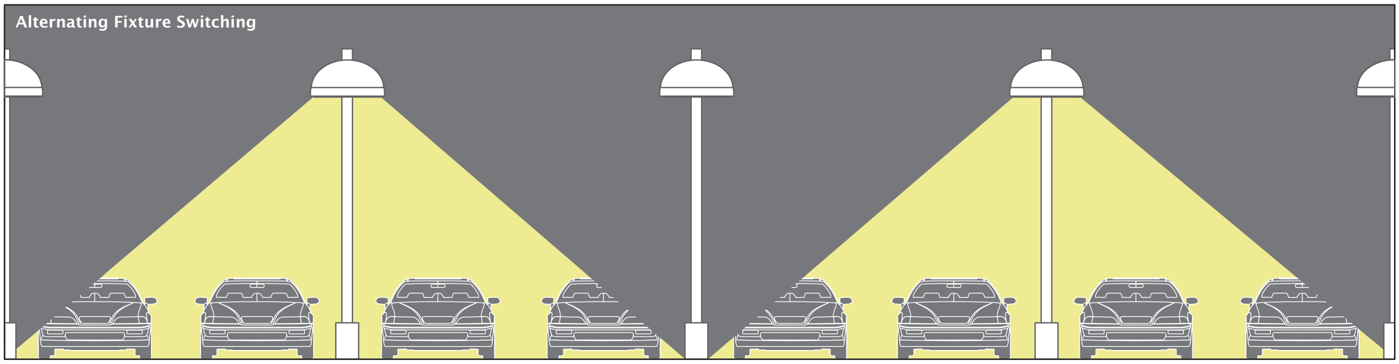
## ENERGY EFFICIENCY

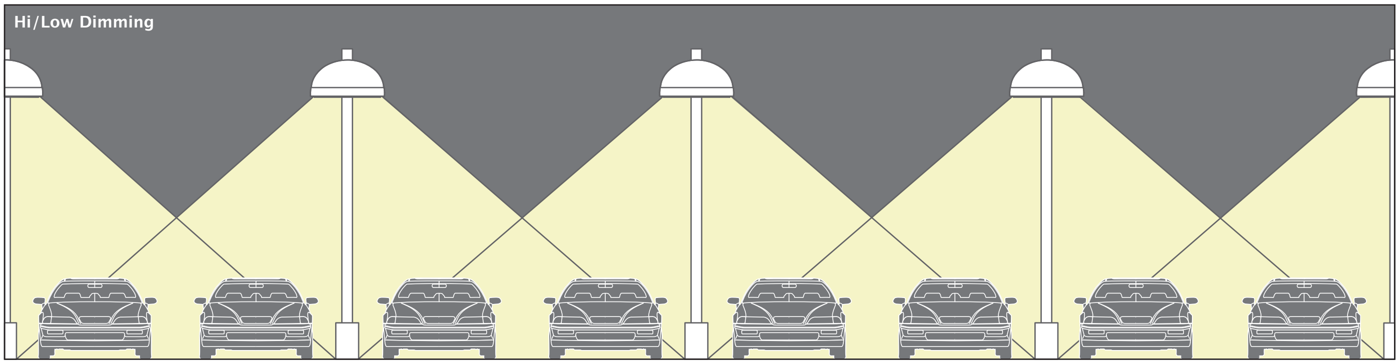
With the Federal Energy Independence and Security Act effective January 1, 2009, states are rapidly adopting energy legislation limiting the use of probe start sources in favor of higher efficiency options. Pulse start technology is being embraced for its efficacy, extended life, high lumen maintenance, and color consistency. The increased color rendering of a pulse start lamp improves visibility and heightens the overall safety and security of the site. Higher lumen maintenance levels reduce the number of fixtures needed to achieve a consistent light level over the fixture's installed life. Initial savings are compounded by decreased energy consumption and less frequent maintenance requirements. By supporting a full array of both horizontal and vertical lamp distributions, Talon offers the broadest selection of energy saving pulse start solutions.



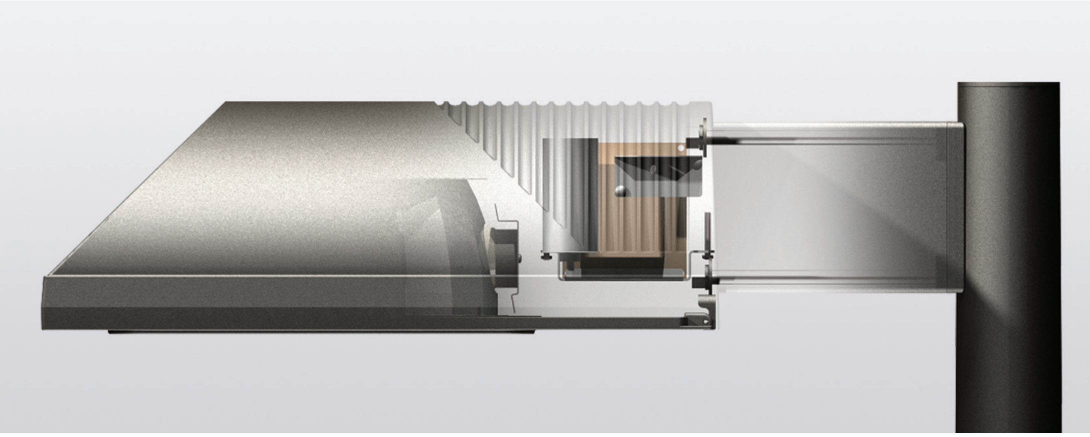
## CURFEW COMPLIANCE

Certain regulatory documents incorporate energy saving measures beyond standard source efficacy, including curfew regulations calling for close of business site lighting power reduction. When alternating luminaires are turned off to accomplish the reduction, site lighting uniformity is greatly reduced, compromising visibility and the feeling of security. The Talon Hi/Low [HL] option enables curfew compliance through an integrated dimming relay internal to the housing that reduces power while closely maintaining critical-to-safety site lighting uniformity levels.





# SPECIFICATION FEATURES



### MOUNTING

Extruded 8" [TMU Talon Medium] or 10 1/2" [TLU Talon Large] aluminum arm includes internal bolt guides allowing for easy positioning of fixture during installation to pole or wall surface. Standard single carton packaging of housing, square pole arm and round pole adapter for contractor friendly arrival of product on site.

### CONSTRUCTION

Heavy-wall, die-cast low-copper alloy aluminum construction with integral reveal channels along top surface of housing to promote heat extraction and prolong electrical component life. Internal cast-in wall separates optical and electrical chambers, allowing components to operate cooler. One-piece heavy-wall, die-cast aluminum door frame with integral cast-in gasket channel seals optical chamber to an IP65 rating. Stainless steel latches and hinges.

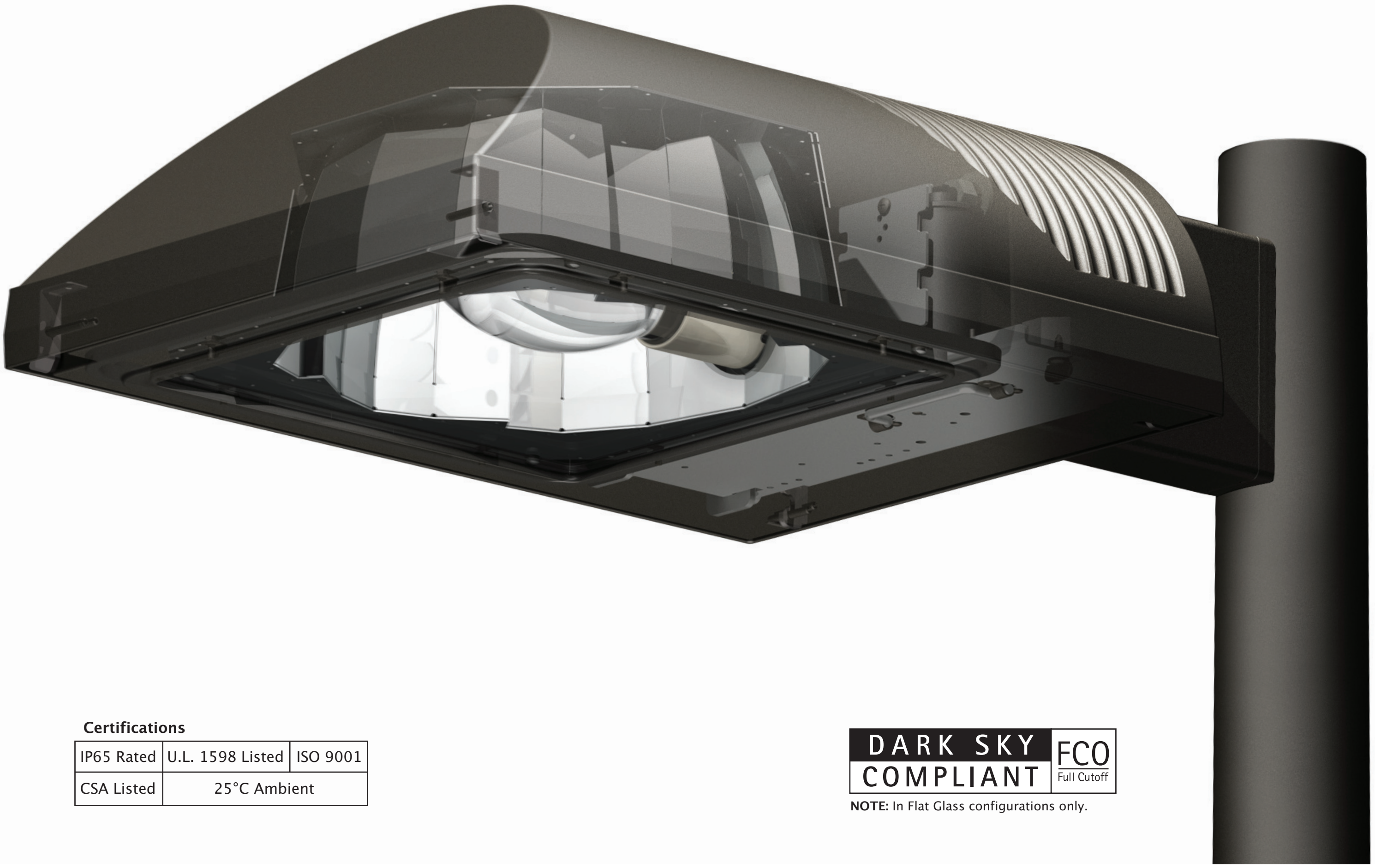
### OPTICAL SYSTEMS

Choice of fourteen [14] high efficiency optical systems utilizing horizontal and vertical lamp orientations, including five [5] optional high efficiency segmented optical systems constructed of premium 95% reflective anodized aluminum sheet. Optical segments are rigidly mounted inside a thick gauge aluminum housing for superior protection. All segment faces are clean of rivet heads, tabs or other means of attachment which may cause streaking in the light distribution. Standard with mogul-base socket for HPS and 175-1000W MH. Standard with medium-base socket for 150W MH and below. All optical modules feature quick disconnect wiring plugs and are field rotatable in 90° increments.

### ELECTRICAL

TMU offered standard with ballast and related electrical componentry hard mounted to die-cast housing for optimal heat transfer and improved operating efficiency. TMU optional and TLU standard, electrical componentry mounted to a swing-down galvanized steel power tray with integral handle. Electrical disconnects allow tray to be completely removed from the housing providing ample hand and tool room for attachment of fixture during installation.

| | **TALON MEDIUM** [TMU] | | | | **TALON LARGE** [TLU] | |
|---|---|---|---|---|---|---|
| **Distribution** | **Lamp Orientation** | **Standard Door Configuration** | **70-200W Lens Type** | **250-400W Lens Type** | **Lamp Orientation** | **250-1000W Lens Type** |
| **2F** | Horizontal | Recessed | Flat/Sag | Flat/Sag | Horizontal | Flat/Sag |
| **2S** | Horizontal | Recessed | Flat/Sag | Flat/Sag | Horizontal | Flat/Sag |
| **3F** | Horizontal | Recessed | Flat/Sag | Flat/Sag | Horizontal | Flat/Sag |
| **3S** | Horizontal | Recessed | Flat/Sag | Flat/Sag | Horizontal | Flat/Sag |
| **4F** | Horizontal | Recessed | Flat/Sag | Flat/Sag | Horizontal | Flat/Sag |
| **4S** | Horizontal | Recessed | Flat/Sag | Flat/Sag | Horizontal | Flat/Sag |
| **5F** | Horizontal | Recessed | Flat/Sag | Flat/Sag | Horizontal | Flat/Sag |
| **5S** | Horizontal | Recessed | Flat/Sag | Flat/Sag | Horizontal | Flat/Sag |
| **SL** | Horizontal | Recessed | Flat/Sag | Flat/Sag | Horizontal | Flat/Sag |
| **AR** | Vertical | Deep | Flat/Sag | Sag | Vertical | Flat/Sag |
| **AS** | Vertical | Deep | Flat/Sag | Sag | Vertical | Flat/Sag |
| **3V** | Vertical | Deep | Flat/Sag | Sag | Vertical | Flat/Sag |
| **4V** | Vertical | Deep | Flat/Sag | Sag | Vertical | Flat/Sag |
| **AF** | Horizontal | Recessed | Flat/Sag | Flat/Sag | Vertical | Flat/Sag |



**Certifications**

| | | |
|---|---|---|
| IP65 Rated | U.L. 1598 Listed | ISO 9001 |
| CSA Listed | 25°C Ambient | |

**DARK SKY COMPLIANT** **FCO** Full Cutoff

**NOTE:** In Flat Glass configurations only.

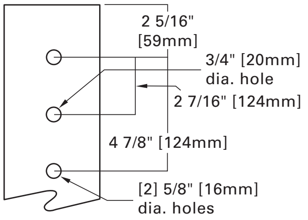
## FINISH

Housing and arm finished in a 5 stage premium TGIC polyester powder coat paint, 2.5 mil nominal thickness for superior protection against fade and wear. Standard colors include black, bronze, grey, white, dark platinum, and graphite metallic.

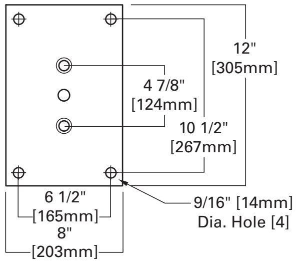
| | |
|---|---|
| **BK**<br>Black | **AP**<br>Grey |
| **BZ**<br>Bronze | **WH**<br>White |
| **DP**<br>Dark Platinum | **GM**<br>Graphite Metallic |

## DRILLING PATTERNS

**Type “M”**


2 5/16"
[59mm]
3/4" [20mm]
dia. hole
2 7/16" [124mm]
4 7/8" [124mm]
[2] 5/8" [16mm]
dia. holes

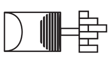
**Wall Mount**

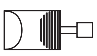

12"
[305mm]
4 7/8"
[124mm]
10 1/2"
[267mm]
6 1/2"
[165mm]
8"
[203mm]
9/16" [14mm]
Dia. Hole [4]

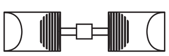
## MOUNTING CONFIGURATIONS

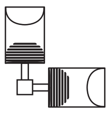
Talon is available in seven [7] unique luminaire mounting configurations.

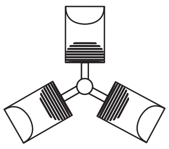
| | Wall Mount | Arm Mount Single | Arm Mount 2 @ 180° | Arm Mount 2 @ 90° | Arm Mount 3 @ 120° | Arm Mount 3 @ 90° | Arm Mount 4 @ 90° |
|---|---|---|---|---|---|---|---|
| **E.P.A.** | | | | | | | |
| **TMU** | | | | | | | |
| Recessed Door | | 1.22 | 2.44 | 2.44 | 3.23 | 3.23 | 3.63 |
| Deep Door | | 1.45 | 2.90 | 2.90 | 3.92 | 3.92 | 4.43 |
| **TLU** | | 2.51 | 5.02 | 5.02 | 6.85 | 6.85 | 7.77 |

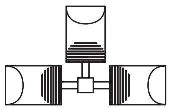


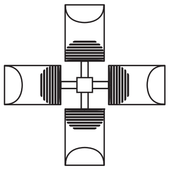




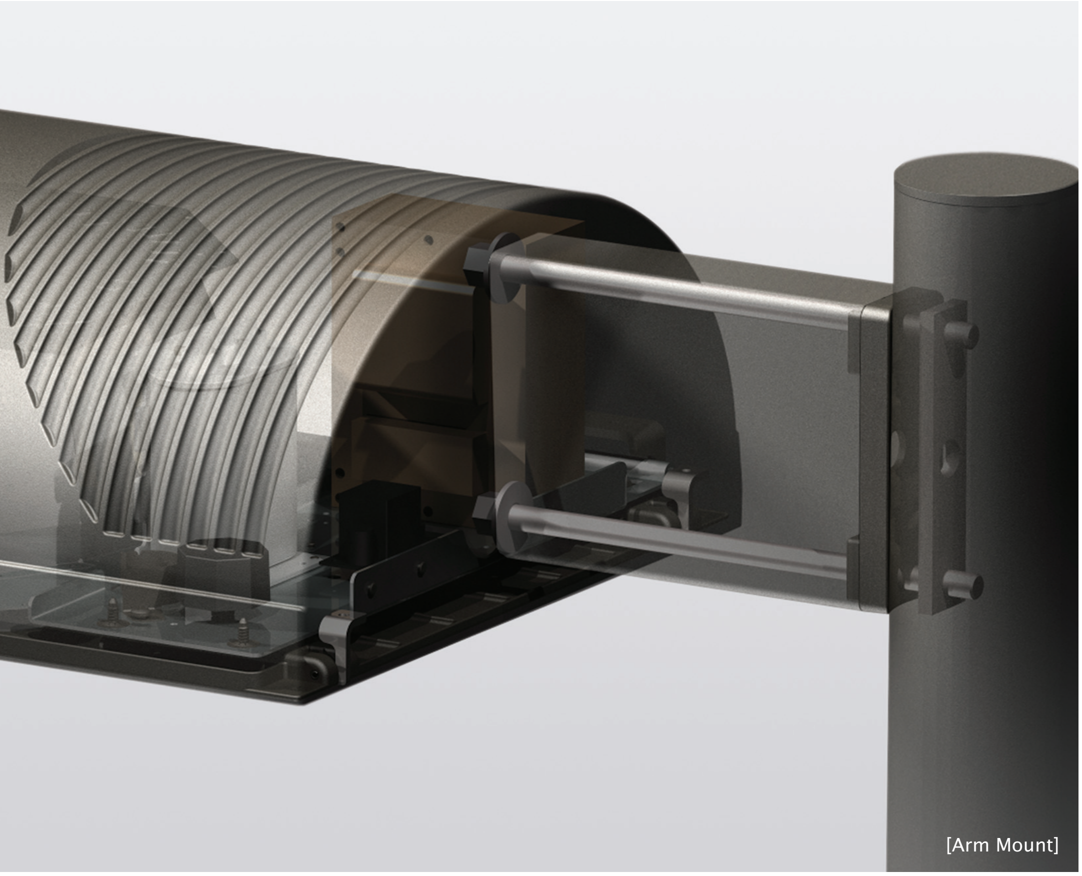








# OPTIONS + ACCESSORIES



[Arm Mount]

[MS]

[WM]

**ARM MOUNT**
Standard 8" [TMU] or 10 1/2" [TLU] extruded aluminum arm features internal bolt guides for twin support rods. Round pole mounting accommodated by utilizing provided round pole adapter between the fixture arm and pole shaft.

**EXTERNAL MAST ARM ADAPTER** [MS]
Cast aluminum mast arm adapter secures fixture head to nominal 2" [2 3/8" O.D. pipe size] horizontal steel tenon arm. Adapter casting slip fits over tenon arm and is secured via two [2] stainless steel bolts.

**WALL BRACKET** [WM]
Wall bracket secured to wall via four [4] lag bolts [lag bolts supplied by other]. Wall bracket kit includes 1/2" thick steel adapter plate, a 8" [TMU] or 10 1/2" [TLU] machined extruded aluminum arm and two [2] fixture support rods.

**TENON ADAPTER**
Tenon adapters available to slip fit over poles equipped with nominal 2" pipe size steel tenon [2 3/8" O.D., 4" length] or nominal 3" pipe size steel tenons [3 1/2" O.D., 5" length]. Adapter secures to tenon via six [6] stainless steel bolts. For complete configuration availability, see Tenon Adapters on page 14.

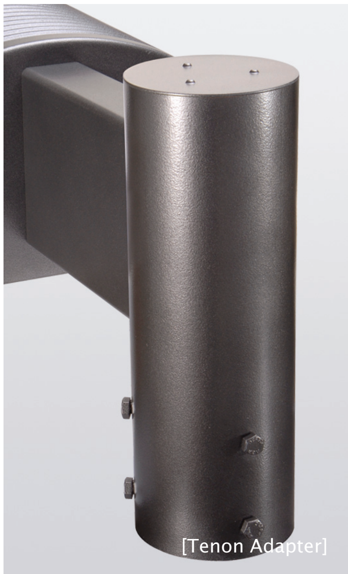
**POLYCARBONATE VANDAL SHIELD** [V]
Internally mounted 3/16" thick molded polycarbonate lens, treated with UV inhibitor to discourage the gradual discoloration that results from exposure to sunlight and UV radiating sources.

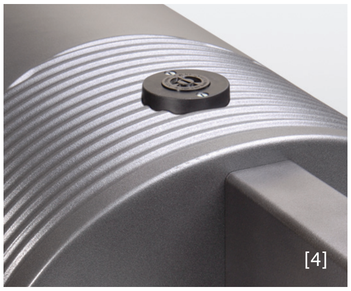
**QUARTZ RESTRIKE** [Q + E]
Optional quartz restrike [Q] energizes auxiliary quartz lamp upon power reactivation and extinguishes once HID lamp re-ignites. Quartz restrike with time delay [E] adds cold start activation.

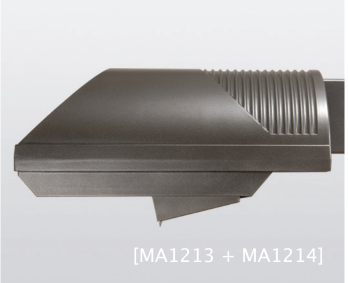
**PHOTOCONTROL RECEPTACLE** [4]
Fixtures available with gasketed photocontrol receptacle for mounting a standard NEMA photocontrol [ordered separately]. Medium housing also available with a button-style photocontrol [P].

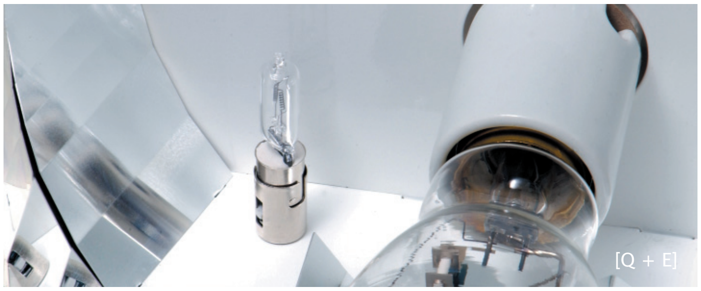
**INTERNAL HOUSE-SIDE SHIELD** [B]
Internal house-side shield reduces light concentration behind the pole while maintaining street side efficiency. Internal house-side shields available on Type II, III, IV and AF distributions.

**EXTERNAL HOUSE-SIDE SHIELD**
[MA1213-XX + MA1214-XX]
External house-side shield provides sharp cutoff behind the pole and shields the lamp from direct view. Mounted to the door frame via double-sided VHB adhesive [TMU] or three [3] stainless steel fasteners [TLU]. Rotatable in 90° increments, the external house-side shield provides industry leading glare and spill light control.









## OPTIONS

[Factory installed and shipped complete with luminaire]

### Electrical

**1**=Single Fuse [120, 277 or 347V]
**2**=Double Fuse [208, 240 or 480V]
**3**=3 Place Terminal Block
**4**=NEMA Twistlock Photocontrol Receptacle
**E**=Quartz Restrike w/Delay [Also Strikes at Cold Start]
**H**=Plug-in Starter Receptacle
**HL**=Hi/Low Dimming [Vertical Optics Only]
**P**=Button Type Photocontrol [TMU Only]
**Q**=Quartz Restrike [Hot Restrike Only]
**R**=Removable Power Tray [Standard on TLU]
**U**=U.L. Listed

### Shields + Doors

**B**=Internal House Side Shield
**DD**=Deep Door [TMU Only]
**V**=Polycarbonate Vandal Shield [TMU Only]

### Mounting

**DM**=Direct Mount for Round or Square Pole
**DW**=Direct Wall Mount Kit
**MS**=External Mast Arm Adapter [TMU Only]
**WM**=Wall Bracket with Arm

## ACCESSORIES

[Field installed and shipped independent of luminaire]

### Electrical

**OA/RA1016**=NEMA Photocontrol [105-285V]
**OA/RA1027**=NEMA Photocontrol [480V]
**OA/RA1201**=NEMA Photocontrol [347V]
**OA/RA1013**=Shorting Cap

### Tenon Adapters

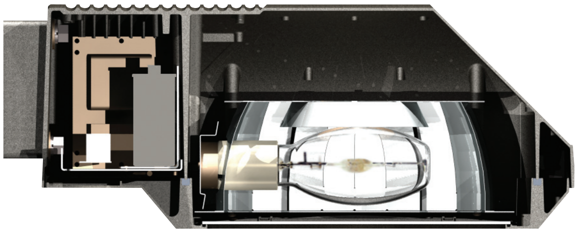
**MA1010-XX**=Single Tenon Adapter for 3 1/2" O.D. Tenon
**MA1011-XX**=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1012-XX**=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1013-XX**=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1014-XX**=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1015-XX**=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1016-XX**=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1017-XX**=Single Tenon Adapter for 2 3/8" O.D. Tenon
**MA1018-XX**=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1019-XX**=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1045-XX**=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1048-XX**=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1049-XX**=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon

### Shields

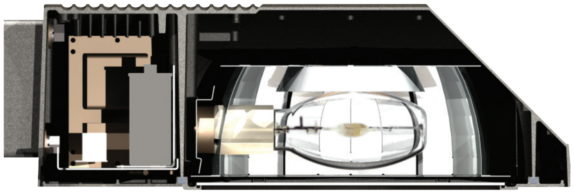
**MA1213-XX**=External House-side Shield Kit [TMU Only]
**MA1214-XX**=External House-side Shield Kit [TLU Only]

### DEEP DOOR [DD]

Medium housing vertically lamped optics are shipped standard with Deep Door. For sites combining horizontal and vertical optics, specify the Deep Door [DD] option on horizontal lamp fixtures to maintain a uniform outward aesthetic. Reflector shifted downward toward the lens to maintain optimal photometric performance [TMU only].

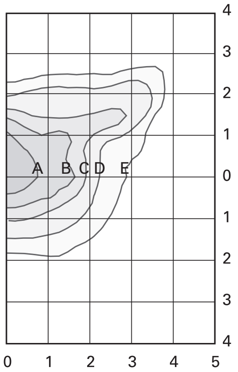


**Horizontal optic in deep door position.**

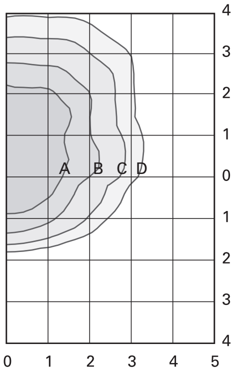


**Horizontal optic in recessed door position.**

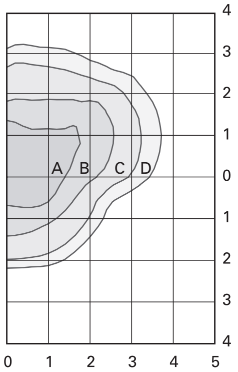
## PHOTOMETRICS [Complete IES files available at www.cooperlighting.com]



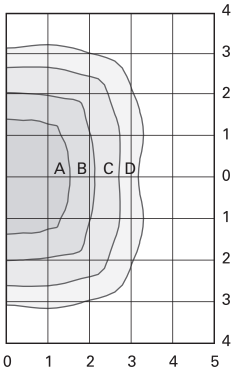
**TMU10SXX3FF**
100-Watt HPS
9,500-Lumen Clear Lamp
Type III Formed
Flat Glass



**TMU15SXX4VS**
150-Watt HPS
16,000-Lumen Clear Lamp
Type IV Vertical
Sag Glass



**TMU17MXX3VF**
175-Watt MH
14,000-Lumen Clear Lamp
Type III Vertical
Flat Glass

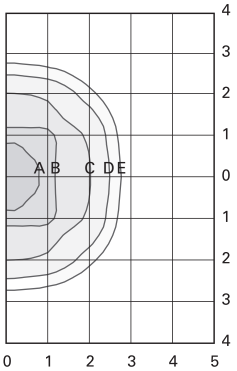


**TMU17MXXASF**
175-Watt MH
14,000-Lumen Clear Lamp
Area Square
Flat Glass

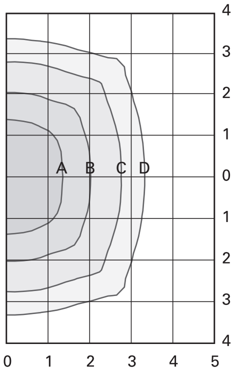
### FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

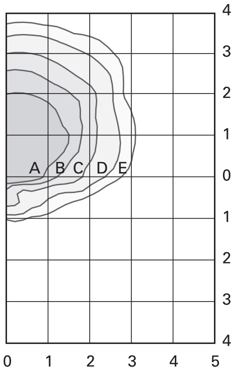
| Mounting Height | Footcandle Values for Isofootcandle Lines | | | | |
|---|---|---|---|---|---|
| | **A** | **B** | **C** | **D** | **E** |
| **100W** [3F] | | | | | |
| 15' | 3.40 | 1.70 | 0.86 | 0.34 | 0.17 |
| **20'** | **2.00** | **1.00** | **0.50** | **0.20** | **0.10** |
| 25' | 1.28 | 0.64 | 0.32 | 0.13 | 0.06 |
| **150W** [4V]/**175W** [3V/AS] | | | | | |
| 15' | 1.70 | 0.85 | 0.34 | 0.17 | -- |
| **20'** | **1.00** | **0.50** | **0.20** | **0.10** | **--** |
| 25' | 0.64 | 0.32 | 0.13 | 0.06 | -- |



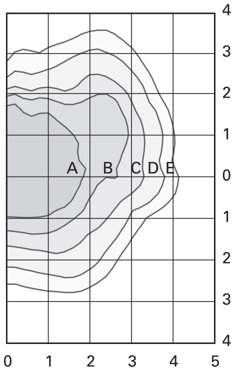
**TMU25SXX5FF**
250-Watt HPS
30,000-Lumen Clear Lamp
Type V Formed
Flat Glass



**TMU25SXXASS**
250-Watt HPS
30,000-Lumen Clear Lamp
Area Square
Sag Glass



**TMU25MXXSLF**
250-Watt MH
20,500-Lumen Clear Lamp
Spill Light Eliminator
Flat Glass

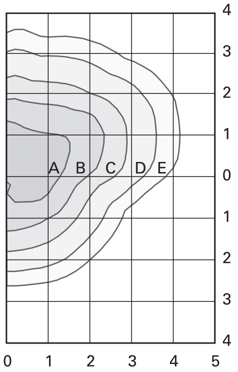


**TMU40MXX3SF**
400-Watt MH
36,000-Lumen Clear Lamp
Type III Segmented
Flat Glass

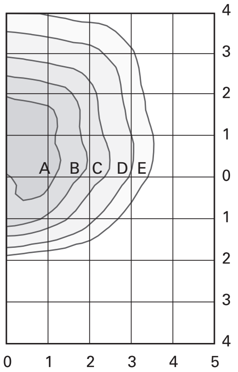
### FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

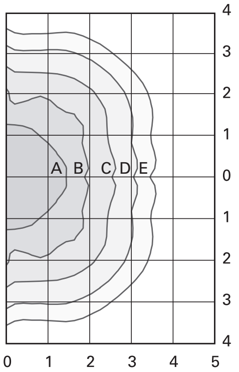
| Mounting Height | Footcandle Values for Isofootcandle Lines | | | | |
|---|---|---|---|---|---|
| | **A** | **B** | **C** | **D** | **E** |
| **250W** [5F/SL]/**400W** [3S] | | | | | |
| 25' | 2.88 | 1.44 | 0.72 | 0.29 | 0.14 |
| **30'** | **2.00** | **1.00** | **0.50** | **0.20** | **0.10** |
| 35' | 1.46 | 0.73 | 0.37 | 0.15 | 0.07 |
| **250W** [AS] | | | | | |
| 25' | 1.44 | 0.72 | 0.29 | 0.14 | -- |
| **30'** | **1.00** | **0.50** | **0.20** | **0.10** | **--** |
| 35' | 0.73 | 0.37 | 0.15 | 0.07 | -- |



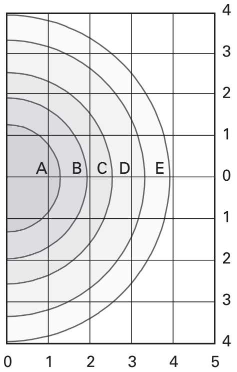
**TMU40MXX3VS**
400-Watt MH
36,000-Lumen Clear Lamp
Type III Vertical
Sag Glass



**TMU40MXX4VS**
400-Watt MH
36,000-Lumen Clear Lamp
Type IV Vertical
Sag Glass



**TMU40MXX5SF**
400-Watt MH
36,000-Lumen Clear Lamp
Type V Segmented
Flat Glass

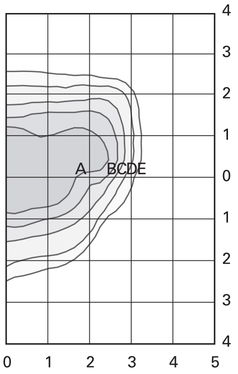


**TMU40MXXARF**
400-Watt MH
36,000-Lumen Clear Lamp
Area Round
Flat Glass

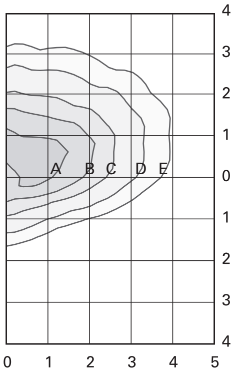
### FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

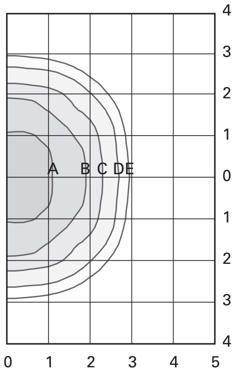
| Mounting Height | Footcandle Values for Isofootcandle Lines | | | | |
|---|---|---|---|---|---|
| | **A** | **B** | **C** | **D** | **E** |
| **400W** [3V/4V/5S/AR] | | | | | |
| 20' | 3.00 | 1.50 | 0.75 | 0.30 | 0.15 |
| **25'** | **2.00** | **1.00** | **0.50** | **0.20** | **0.10** |
| 30' | 1.38 | 0.69 | 0.34 | 0.13 | 0.06 |



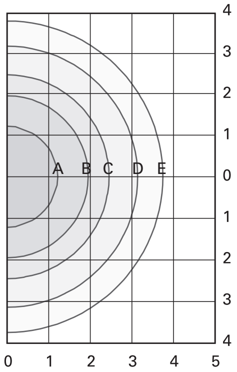
**TMU40SXX2FF**
400-Watt HPS
50,000-Lumen Clear Lamp
Type II Formed
Flat Glass



**TMU40SXX3VSB**
400-Watt HPS
50,000-Lumen Clear Lamp
Type III Vertical Sag Glass
Internal House-side Shield



**TMU40SXX5FF**
400-Watt HPS
50,000-Lumen Clear Lamp
Type V Formed
Flat Glass



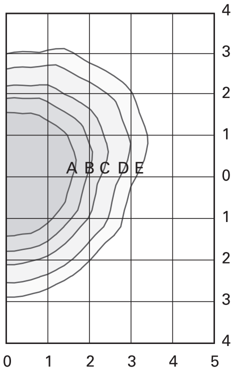
**TMU40SXXARS**
400-Watt HPS
50,000-Lumen Clear Lamp
Area Round
Sag Glass

### FOOTCANDLE TABLE

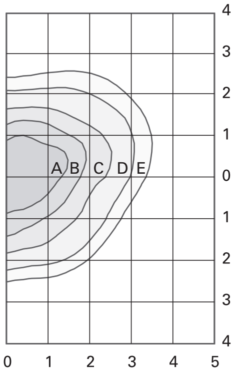
Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

| Mounting Height | Footcandle Values for Isofootcandle Lines | | | | |
|---|---|---|---|---|---|
| | **A** | **B** | **C** | **D** | **E** |
| **400W** [2F/3VB/5F/AR] | | | | | |
| 25' | 2.88 | 1.44 | 0.72 | 0.29 | 0.14 |
| **30'** | **2.00** | **1.00** | **0.50** | **0.20** | **0.10** |
| 35' | 1.46 | 0.73 | 0.37 | 0.15 | 0.07 |

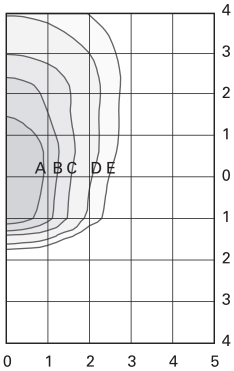
## **PHOTOMETRICS** [Complete IES files available at www.cooperlighting.com]



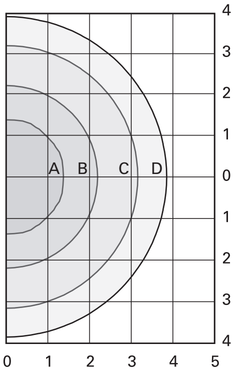
**TLU40SXX3VF**
400-Watt HPS
50,000-Lumen Clear Lamp
Type III Vertical
Flat Glass



**TLU40MXX3FF**
400-Watt MH
36,000-Lumen Clear Lamp
Type III Formed
Flat Glass



**TLU40SXX4FF**
400-Watt HPS
50,000-Lumen Clear Lamp
Type IV Formed
Flat Glass

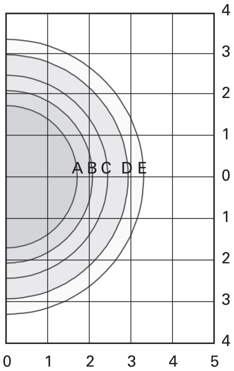


**TLU40MXXARS**
400-Watt MH
36,000-Lumen Clear Lamp
Area Round
Sag Glass

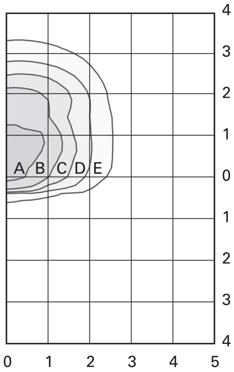
### FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

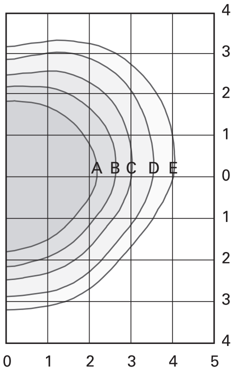
| **Mounting Height** | **Footcandle Values for Isofootcandle Lines** | | | | |
|---|---|---|---|---|---|
| | **A** | **B** | **C** | **D** | **E** |
| **400W** [3F/4F/3V] | | | | | |
| 25' | 2.88 | 1.44 | 0.72 | 0.29 | 0.14 |
| **30'** | **2.00** | **1.00** | **0.50** | **0.20** | **0.10** |
| 35' | 1.46 | 0.73 | 0.37 | 0.15 | 0.07 |
| **400W** [AR] | | | | | |
| 25' | 1.44 | 0.72 | 0.29 | 0.14 | -- |
| **30'** | **1.00** | **0.50** | **0.20** | **0.10** | **--** |
| 35' | 0.73 | 0.37 | 0.15 | 0.07 | -- |



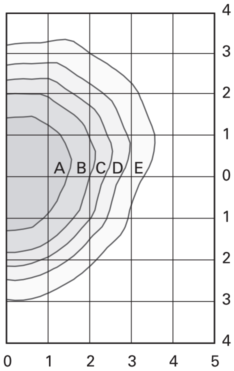
**TLU40SXXARF**
400-Watt HPS
50,000-Lumen Clear Lamp
Area Round
Flat Glass



**TLU40SXXSLF**
400-Watt HPS
50,000-Lumen Clear Lamp
Spill Light Eliminator
Flat Glass



**TLU91SXX3FF**
1000-Watt HPS
135,000-Lumen Clear Lamp
Type III Formed
Flat Glass

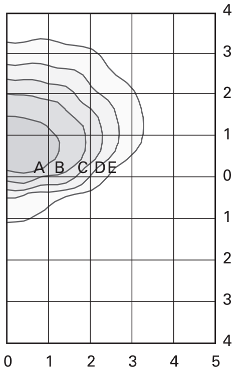


**TLU91MXX3VF**
1000-Watt MH
110,000-Lumen Clear Lamp
Type III Vertical
Flat Glass

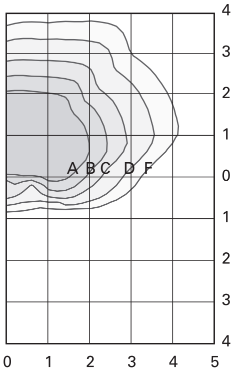
### FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

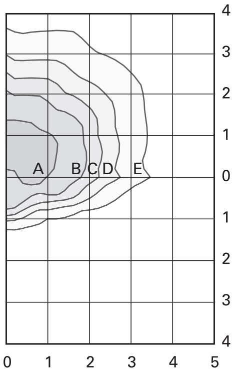
| **Mounting Height** | **Footcandle Values for Isofootcandle Lines** | | | | |
|---|---|---|---|---|---|
| | **A** | **B** | **C** | **D** | **E** |
| **400W** [AR]/**1000W** [3F] | | | | | |
| 25' | 2.88 | 1.44 | 0.72 | 0.29 | 0.14 |
| **30'** | **2.00** | **1.00** | **0.50** | **0.20** | **0.10** |
| 35' | 1.46 | 0.73 | 0.37 | 0.15 | 0.07 |
| **1000W** [SL/3V] | | | | | |
| 25' | 7.20 | 2.88 | 1.44 | 0.72 | 0.29 |
| **30'** | **5.00** | **2.00** | **1.00** | **0.50** | **0.20** |
| 35' | 3.65 | 1.46 | 0.73 | 0.37 | 0.15 |



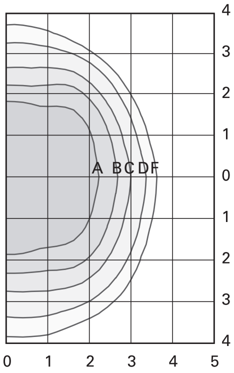
**TLU91MXX3VFEHS**
1000-Watt MH
110,000-Lumen Clear Lamp
Type III Vertical Flat Glass
External House-side Shield



**TLU91SXX3VFEHS**
1000-Watt HPS
135,000-Lumen Clear Lamp
Type III Vertical Flat Glass
External House-side Shield



**TLU91MXX4VFB**
1000-Watt MH
110,000-Lumen Clear Lamp
Type IV Vertical Flat Glass
House-side Shield

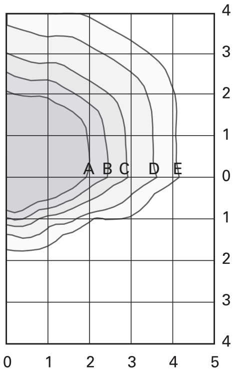


**TLU91SXX5FF**
1000-Watt HPS
135,000-Lumen Clear Lamp
Type V Formed
Flat Glass

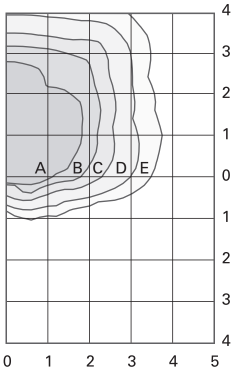
### FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

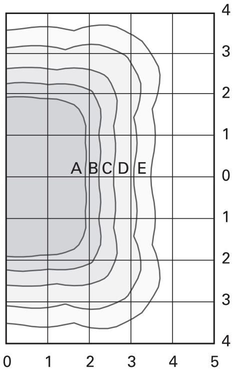
| **Mounting Height** | **Footcandle Values for Isofootcandle Lines** | | | | |
|---|---|---|---|---|---|
| | **A** | **B** | **C** | **D** | **E** |
| **1000W** [3V-EHS (HPS)/5F] | | | | | |
| 25' | 2.88 | 1.44 | 0.72 | 0.29 | 0.14 |
| **30'** | **2.00** | **1.00** | **0.50** | **0.20** | **0.10** |
| 35' | 1.46 | 0.73 | 0.37 | 0.15 | 0.07 |
| **1000W** [3V-EHS (MH)/4VB] | | | | | |
| 25' | 7.20 | 2.88 | 1.44 | 0.72 | 0.29 |
| **30'** | **5.00** | **2.00** | **1.00** | **0.50** | **0.20** |
| 35' | 3.65 | 1.46 | 0.73 | 0.37 | 0.15 |



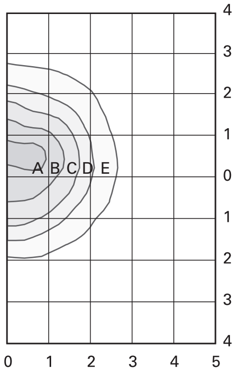
**TLU91SXX4VFB**
1000-Watt HPS
135,000-Lumen Clear Lamp
Type IV Vertical Flat Glass
Internal House-side Shield



**TLU91MXXSLF**
1000-Watt MH
110,000-Lumen Clear Lamp
Spill Light Eliminator
Flat Glass



**TLU91MXXASF**
1000-Watt MH
110,000-Lumen Clear Lamp
Area Square
Flat Glass



**TLU91MXXAFF**
1000-Watt MH
110,000-Lumen Clear Lamp
Automotive Front Row
Flat Glass

### FOOTCANDLE TABLE

Select mounting height and read across for footcandle values of each isofootcandle line. Distance in units of mounting height.

| **Mounting Height** | **Footcandle Values for Isofootcandle Lines** | | | | |
|---|---|---|---|---|---|
| | **A** | **B** | **C** | **D** | **E** |
| **1000W** [4V/SL/AS] | | | | | |
| 25' | 2.88 | 1.44 | 0.72 | 0.29 | 0.14 |
| **30'** | **2.00** | **1.00** | **0.50** | **0.20** | **0.10** |
| 35' | 1.46 | 0.73 | 0.37 | 0.15 | 0.07 |
| **1000W** [AF] | | | | | |
| **25'** | **30.00** | **10.00** | **3.00** | **1.00** | **0.20** |
| 27' | 25.50 | 8.50 | 2.55 | 0.85 | 0.17 |
| 30' | 20.70 | 6.90 | 2.07 | 0.69 | 0.14 |

# **TMU** TALON MEDIUM

## ORDERING INFORMATION

**SAMPLE NUMBER:** TMU40SWW3SF

**PRODUCT FAMILY** [1]
**TMU**=Talon Site Medium

**LAMP WATTAGE** [2]
**70**=70W
**10**=100W
**15**=150W
**17**=175W
**20**=200W
**25**=250W
**32**=320W [3, 4]
**35**=350W [3, 4]
**40**=400W [4]
**24**=250/400W wired 250W
**42**=250/400W wired 400W

**LAMP TYPE**
**S**=High Pressure Sodium
**R**=Super Metal Halide
**M**=Metal Halide
**P**=Pulse Start Metal Halide

**BALLAST TYPE**
**C**=CWI
**H**=Reac./HPF
**K**=10KV CWA
**N**=Hi. Reac./NPF
**P**=Hi. Reac./HPF
**R**=Reac./NPF
**W**=CWA

**VOLTAGE**
**2**=120V
**0**=208V
**4**=240V
**7**=277V
**8**=480V
**9**=347V
**N**=Multi-Tap wired 277V
**W**=Multi-Tap wired 120V
**V**=Multi-Tap wired 240V

**DISTRIBUTION**
**Horizontal Lamp**
**2F**=Type II Formed
**2S**=Type II Segmented
**3F**=Type III Formed
**3S**=Type III Segmented
**4F**=Type IV Formed
**4S**=Type IV Segmented
**5F**=Type V Formed
**5S**=Type V Segmented
**SL**=Spill Light Eliminator
**AF**=Automotive Front Row
**Vertical Lamp**
**3V**=Type III Vertical [5]
**4V**=Type IV Vertical [5]
**AR**=Area Round [5]
**AS**=Area Square [5]

**LENS TYPE**
**F**=Flat Glass
**S**=Sag Glass

**COLOR**
[add as suffix /must specify]
**WH**=White
**BK**=Black
**AP**=Grey
**BZ**=Bronze
**DP**=Dark Platinum
**GM**=Graphite Metallic

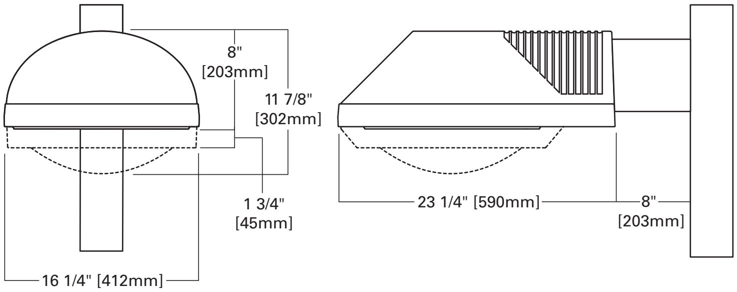
**OPTIONS + ACCESSORIES**
[See Below]

## OPTIONS + ACCESSORIES [must be ordered in alphanumeric order]

**OPTIONS** [add as suffix]
**1**=Single Fuse [120, 277 or 347V] [6]
**2**=Double Fuse [208, 240 or 480V] [6]
**3**=Three Place Terminal Block
**4**=NEMA Twistlock Photocontrol Receptacle
**B**=Internal House-side Shield [7]
**DD**=Deep Door
**DM**=Direct Mount for Round or Square Pole
**DW**=Direct Wall Mount Kit
**E**=Quartz Restrike w/Delay [Also Strikes at Cold Start] [8]
**H**=Plug-in Starter Receptacle
**HL**=Hi/Low Dimming [9]
**L**=Lamp Included
**MS**=External Mast Arm Adapter
**P**=Button Type Photocontrol [120, 208, 240 or 277V] [6]
**Q**=Quartz Restrike [Hot Restrike Only] [8]
**R**=Removable Power Tray
**U**=U.L. Listed
**V**=Polycarbonate Vandal Shield
**WM**=Wall Bracket with 8" Arm

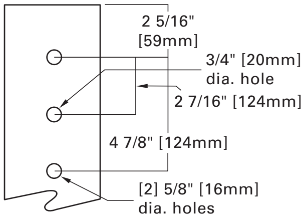
**ACCESSORIES** [order separately/replace XX with color designation]
**OA/RA1016**=NEMA Photocontrol [105-285V]
**OA/RA1027**=NEMA Photocontrol [480V]
**OA/RA1201**=NEMA Photocontrol [347V]
**OA/RA1013**=Shorting Cap
**MA1010-XX**=Single Tenon Adapter for 3 1/2" O.D. Tenon
**MA1011-XX**=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1012-XX**=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1013-XX**=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1014-XX**=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1015-XX**=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1016-XX**=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1017-XX**=Single Tenon Adapter for 2 3/8" O.D. Tenon
**MA1018-XX**=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1019-XX**=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1045-XX**=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1048-XX**=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1049-XX**=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1213-XX**=External House-side Shield Kit [EPA=0.38]

## DIMENSIONS

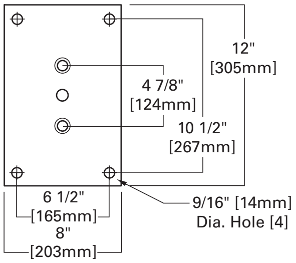


## DRILLING PATTERNS

### TYPE "M"



### WALL MOUNT



## CERTIFICATIONS

| | |
|---|---|
| IP65 Rated | CSA Listed |
| 25° C Ambient Temperature | ISO 9001 |
| U.L. 1598 Listed | FCO [Full Cutoff] Flat Glass Only |

## WATTAGE TABLE

| Lamp Type | Wattage |
|---|---|
| Metal Halide | 175, 250, 400W |
| Pulse Start Metal Halide | 70, 100, 150, 175, 200, 250, 320, 350, 400W |
| Super Metal Halide | 175, 250, 400W |
| High Pressure Sodium | 70, 100, 150, 250, 400W |

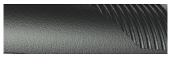
## EPA

| Effective Projected Area | |
|---|---|
| Recessed Door w/o Arm: | 0.79 |
| Deep Door w/o Arm: | 1.02 |
| 8" Arm: | 0.43 |

## SHIPPING DATA

| Approximate Net Weight | |
|---|---|
| Recessed Door | 47 lbs. [21.79 kgs.] |
| Deep Door | 52 lbs. [23.63 kgs.] |

## STANDARD COLORS

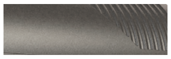

**BK**
Black

**AP**
Grey

**BZ**
Bronze

**WH**
White

**DP**
Dark Platinum


**GM**
Graphite Metallic

**NOTES:** **1** 8" arm and round pole adapter included with fixture. **2** Standard with mogul-base socket for HPS and 100-400W MH. Standard with medium-base socket for 70W MH. **3** 320/350W Pulse Start Metal Halide lamp only. **4** Requires reduced envelope lamp. **5** Vertical lamp optics ship standard with deep door. Flat glass not available for 250W—400W. **6** Must specify voltage. **7** House-side shield not available on 5S, 5F, AS, AR and SL optics. **8** Quartz options not available with SL and AF optics. **9** Requires vertical lamp orientation. Provides 24V low voltage leads used in dimming controls. **10** Specifications and dimensions subject to change without notice.

# **TLU** TALON LARGE

## ORDERING INFORMATION

**SAMPLE NUMBER:** TLU91SWW3VF

**PRODUCT FAMILY** [1]
**TLU**=Talon Site Large

**LAMP WATTAGE**
**25**=250W
**32**=320W [2]
**35**=350W [2]
**40**=400W
**75**=750W
**87**=875W [2]
**91**=1000W [3]

**LAMP TYPE**
**S**=High Pressure Sodium
**R**=Super Metal Halide
**M**=Metal Halide
**P**=Pulse Start Metal Halide

**BALLAST TYPE**
**C**=CWI
**H**=Reac./HPF
**K**=10KV CWA
**M**=Mag. Reg.
**N**=Hi. Reac./NPF
**P**=Hi. Reac./HPF
**R**=Reac./NPF
**W**=CWA

**VOLTAGE**
**2**=120V
**0**=208V
**4**=240V
**7**=277V
**8**=480V
**9**=347V
**N**=Multi-Tap wired 277V
**W**=Multi-Tap wired 120V
**V**=Multi-Tap wired 240V

**DISTRIBUTION**
**Horizontal Lamp**
**2F**=Type II Formed
**2S**=Type II Segmented [4]
**3F**=Type III Formed
**3S**=Type III Segmented [4]
**4F**=Type IV Formed
**4S**=Type IV Segmented [4]
**5F**=Type V Formed
**5S**=Type V Segmented [4]
**SL**=Spill Light Eliminator [3]
**Vertical Lamp**
**3V**=Type III Vertical
**4V**=Type IV Vertical
**AR**=Area Round
**AS**=Area Square
**AF**=Automotive Front Row

**LENS TYPE**
**F**=Flat Glass
**S**=Sag Glass

**COLOR**
[add as suffix /must specify]
**WH**=White
**BK**=Black
**AP**=Grey
**BZ**=Bronze
**DP**=Dark Platinum
**GM**=Graphite Metallic

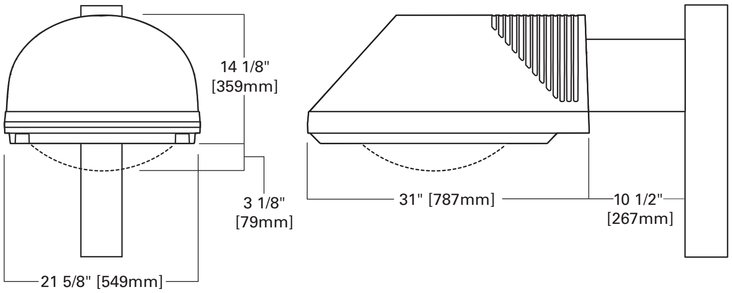
**OPTIONS + ACCESSORIES**
[See Below]

## OPTIONS + ACCESSORIES [must be ordered in alphanumeric order]

**OPTIONS** [add as suffix]
**1**=Single Fuse [120, 277 or 347V] [5]
**2**=Double Fuse [208, 240 or 480V] [5]
**3**=Three Place Terminal Block
**4**=NEMA Twistlock Photocontrol Receptacle
**B**=Internal House-side Shield [6]
**DM**=Direct Mount for Pole
**E**=Quartz Restrike w/Delay [Also Strikes at Cold Start] [7]
**H**=Plug-in Starter Receptacle [8]
**HL**=Hi/Low Dimming [9]
**L**=Lamp Included
**Q**=Quartz Restrike [Hot Restrike Only] [7]
**U**=U.L. Listed
**WM**=Wall Bracket with 10 1/2" Arm

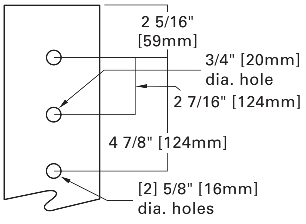
**ACCESSORIES** [order separately/replace XX with color designation]
**OA/RA1016**=NEMA Photocontrol [105-285V]
**OA/RA1027**=NEMA Photocontrol [480V]
**OA/RA1201**=NEMA Photocontrol [347V]
**OA/RA1013**=Shorting Cap
**MA1010-XX**=Single Tenon Adapter for 3 1/2" O.D. Tenon
**MA1011-XX**=2 @ 180° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1012-XX**=3 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1013-XX**=4 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1014-XX**=2 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1015-XX**=2 @ 120° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1016-XX**=3 @ 90° Tenon Adapter for 3 1/2" O.D. Tenon
**MA1017-XX**=Single Tenon Adapter for 2 3/8" O.D. Tenon
**MA1018-XX**=2 @ 180° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1019-XX**=3 @ 120° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1045-XX**=4 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1048-XX**=2 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1049-XX**=3 @ 90° Tenon Adapter for 2 3/8" O.D. Tenon
**MA1214-XX**=External House-side Shield Kit [EPA=0.94]

## DIMENSIONS

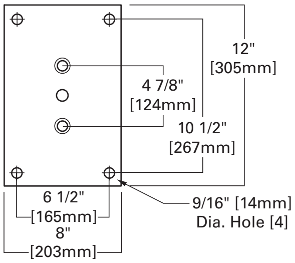


## DRILLING PATTERNS

### TYPE "M"



### WALL MOUNT



## CERTIFICATIONS

| | |
|---|---|
| IP65 Rated | CSA Listed |
| 25° C Ambient Temperature | ISO 9001 |
| U.L. 1598 Listed | FCO [Full Cutoff] Flat Glass Only |

## WATTAGE TABLE

| Lamp Type | Wattage |
|---|---|
| Metal Halide | 250, 400, 1000W |
| Pulse Start Metal Halide | 250, 320, 350, 400, 450, 750, 875, 1000W |
| Super Metal Halide | 250, 400, 750, 1000W |
| High Pressure Sodium | 250, 400, 1000W |

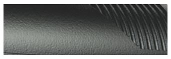
## EPA

| Effective Projected Area | |
|---|---|
| Without Arm: | 1.82 |
| 10 1/2" Arm: | 0.6 |

## SHIPPING DATA

| Approximate Net Weight | |
|---|---|
| 400W | 91 lbs. [41.36 kgs.] |
| 1000W | 98 lbs. [44.54 kgs.] |

## STANDARD COLORS

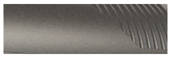

**BK**
Black

**AP**
Grey

**BZ**
Bronze

**WH**
White

**DP**
Dark Platinum


**GM**
Graphite Metallic

**NOTES: 1** 10 1/2" arm and round pole adapter included with fixture. **2** 320/350/875W Pulse Start Metal Halide lamp only. **3** Requires reduced envelope lamp. **4** Maximum wattage on segmented optical distributions is 400W. 400W Metal Halide lamp must use reduced envelope ED-28 lamp. **5** Must Specify Voltage. **6** House-side shield not available on 5S, 5F, AS, AR and SL optics. **7** Quartz options not available with SL and AF optics. **8** Not available in 1000W. **9** Requires vertical lamp orientation. Provides 24V low voltage leads used in dimming control. **10** Specifications and dimensions subject to change without notice.

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Mississauga, Ontario L5R 1B8

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